

REMARKS

Claims 1-86 are pending. Claims 1-83 are original. Claim 84 has been presented previously. Claims 85 and 86 are new. No new matter has been introduced by the amendment.

1. Summary of Phone Interview with the Examiner on October 25, 2006

The Applicant's representative appreciates the Examiner's time in a telephonic interview regarding the present patent application and the Office Action dated September 20, 2006. During the interview, the Examiner suggested that the Applicant file supplemental arguments in a post-final response. The Examiner further indicated that he is willing to withdraw the finalities of the rejections if he finds the supplemental arguments persuasive.

2. Claim Rejection under 35 U.S.C. § 102(e), 35 U.S.C. § 103(a), And Claim Objections

Claims 1, 14-15, 42, and 54-55 have been rejected under 35 U.S.C. § 102(e) over Wen et al. (U.S. Pat. Pub. No. 2004/0239846). Claims 4-5, 8-9, 13, 45-46, 49 and 53 have been rejected under 35 U.S.C. § 103(a) over Wen in view of Park et al. (U.S. Pat. Pub. No. 2002/0109811). Claims 2-3, 6-7, 10-12, 43-44, 47-48 and 50-52 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Applicants respectfully traverse these rejections and objections based on the following remarks.

The Examiner has conceded that Wen does not expressly teach or suggest that each unit pixel includes a plurality of sub-pixel regions, each of the sub-pixel

regions including a transmissive portion and a reflective portion. The Examiner attempted to overcome this deficiency by asserting that it is well-known to those skilled in the art that a pixel consists of red, green and blue sub-pixels (Office Action, page 2). Nevertheless, Wen does not teach or suggest any spatial relationship between the plurality of sub-pixel regions including a transmissive portion and a reflective portion even if we assume the Examiner's assertion would be correct for argument purpose. For example, the red, green, blue sub-pixel regions could be disposed linearly from left to right. The transmissive portion in each sub-pixel could be on the left side while the reflective portion in each sub-pixel could be on the right side. As a result, the transmissive portions would be separated by the reflective portions. In other words, Wen does not teach or suggest that the transmissive portions are gathered together within each unit pixel.

In contrast, the transfective liquid crystal display recited in independent claims 1 and 42 comprises a plurality of unit pixels, each unit pixel including a plurality of sub-pixel regions, each of the sub-pixel regions including a transmissive portion and a reflective portion, the transmissive portions gathered together within each unit pixel.

In view of the above remarks, the Applicants respectfully submit that Wen does not teach or suggest all the limitations as recited in independent claims 1 and 42. Accordingly, the rejections against claims 1 and 42, and thus the rejections against or objections to claims 2-15 and 43-55, which all depend from independent claims 1 and 42, respectively, are moot and should be withdrawn.

3. New Claims

New claims 85 and 86 are based on original independent claims 1 and 42, with a new limitation incorporated from allowed independent claim 56. The changes to new claims 85 and 86 relative to original independent claims 1 and 42,

respectively, are shown in Appendix A, with underlines for added matter and strikethroughs for deleted matter.

Similar to the argument in the previous section, Wen does not teach or suggest any spatial relationship between the plurality of sub-pixel regions including a transmissive portion and a reflective portion. Specifically, Wen does not teach or suggest that adjacent pairs of the transmissive portions in different sub-pixel regions within each unit pixel are arranged such that no reflective portion is disposed between the pair of transmissive portions.

In contrast, the transfective liquid crystal display recited in new independent claims 85 and 86 comprises a plurality of unit pixels, each unit pixel including a plurality of sub-pixel regions, each of the sub-pixel regions including a transmissive portion and a reflective portion, adjacent pairs of the transmissive portions in different sub-pixel regions within each unit pixel arranged such that no reflective portion is disposed between the pair of transmissive portions. Support for new claims 85 and 85 can be found in Applicants' specification, for example, in original claims 1, 42 and 56.

In view of the above amendments and remarks, the Applicants respectfully submit that new independent claims 85 and 85 are distinguishable from Wen, and should be patentable.

4. Allowed Subject Matters

Claims 16-41 and 56-84 are allowed.

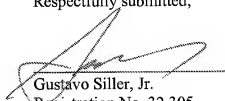
5. Conclusion

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Based on the above remarks, the Applicants respectfully submit that the claims are in condition for allowance. The examiner is kindly invited to contact the undersigned attorney to expedite allowance.

Respectfully submitted,

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Appendix A

Changes to new claims 85 and 86 relative to original independent claims 1 and 42, respectively, with underlines for added matter and strikethroughs for deleted matter

85. (New) A transfective liquid crystal display, comprising:
gate and data lines crossing each other and defining a plurality of unit pixels, each unit pixel including a plurality of sub-pixel regions, each of the sub-pixel regions including a transmissive portion and a reflective portion, ~~the transmissive portions gathered together within each unit pixel~~ adjacent pairs of the transmissive portions in different sub-pixel regions within each unit pixel arranged such that no reflective portion is disposed between the pair of transmissive portions;

a thin film transistor in each sub-pixel region near a crossing of one of the gate and data lines adjacent to the sub-pixel region;

a passivation layer covering the thin film transistors and the gate and data lines, the passivation layer having openings that correspond to the transmissive portions in the unit pixels;

a reflector formed over the passivation layer in each sub-pixel region, the reflector corresponding in position to the reflective portion;

a pixel electrode in each sub-pixel region, the pixel electrode contacting the thin film transistor through a contact hole in the passivation layer.

86. (New) A method of forming a transfective liquid crystal display, the method comprising:

forming gate and data lines that perpendicularly cross each other and define a plurality of unit pixels, each unit pixel including a plurality of sub-pixel regions, each sub-pixel region including a transmissive portions and a

reflective portion, ~~the transmissive portions gathered together within each unit pixel~~ adjacent pairs of the transmissive portions in different sub-pixel regions within each unit pixel arranged such that no reflective portion is disposed between the pair of transmissive portions;

forming a thin film transistors in each sub-pixel region near a crossing of the gate and data lines;

forming a passivation layer to cover the thin film transistors and the gate and data lines, the passivation layer having an opening that corresponds to the transmissive portions in each unit pixel;

forming a reflector formed over the passivation layer in each sub-pixel region, the reflector corresponding in position to the reflective portion;

forming a pixel electrode in each sub-pixel region, the pixel electrode contacting the thin film transistor throughout a contact hole in the passivation layer.